UNITED STATES ENVIRONMENTAL PROTECTION AGENCY **REGION III**



Environmental Sciences Center 701 Mapes Road Fort Meade, Maryland 20755-5350

DATE:

February 8, 2012

SUBJECT:

Region III Data QA Review

FROM:

Colleen Walling

Region III ESAT RPO (3EA20)

TO:

Rich Fetzer

Remedial Project Manager (3HS31)

Attached is the organic data validation report for the Dimock Residential Groundwater site (Case #: 180-2644-1) completed by the Region III Environmental Services Assistance Team (ESAT) contractor under the direction of Region III EAID.

If you have any questions regarding this review, please call me at (410) 305-2763.

Attachment

TO: #0037

TDF: #02024A

cc: Gene Nance (Techlaw)

Suddha Graves (Techlaw)

OFFICE OF ANALYTICAL SERVICES AND QUALITY ASSURANCE

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Lockheed Martin IS&GS - Civil
Energy & Environment
ESAT Region 3
US EPA Environmental Science Center
701 Mapes Road Ft. Meade, MD 20755-5350

Ex. 4 - CBI

Date:

February 07, 2012

Subject:

Organic Data Validation (M3 Level)

Project: 180-2644-1 Site: Dimock

From:

Ex. 4 - CBI

Organic Data Reviewer

Ex. 4 - CBI

Senior Oversight Chemist

To:

Ex. 4 - CBI

ESAT Region 3 Project Officer

<u>OVERVIEW</u>

Third party Project 180-2644-1, consisted of two (2) aqueous samples analyzed for the following parameters by the methods listed below. All analyses were performed by TestAmerica – Pittsburgh (TALPA) through the Delivery of Analytical Services (DAS) program.

<u>Parameter</u>	<u>Method</u>
Volatile Organic Compounds	EPA 8260B
Semivolatile Organic Compounds	EPA 8270C
Glycols	EPA 8015C
Dissolved gases	RSK-175
Gas Range Organics	EPA 8015B
Ethylene dibromide	EPA 8011
Diesel Range Organics	EPA 8015B

SUMMARY

Data were validated according to Region 3 Modifications to the National Functional Guidelines for Organic Data Review, Level M3 and is assigned the Superfund Data Validation Label S4VM (Stage_4_Validation_Manual). Areas of concern with respect to data usability are listed below.

MINOR PROBLEM

• The laboratory reported that samples for dissolved gases analyses had a pH greater than two (>2) when received. Analysis of these samples was performed six (6) days after collection. Samples must be preserved to pH of less than two (<2) for dissolved gases. The positive result reported for methane in TC-1 was qualified "L" on the DSF. Quantitation limits for remaining compounds in these samples were qualified "UL" on the DSF.</p>

NOTES

- Several compounds failed precision criteria [Percent Difference (%D)] in continuing
 calibrations associated with volatile, semivolatile and dissolved gases fractions. No positive
 results were reported for these compounds. The quantitation limit for semivolatile compound
 benzidine exceeded the 50% criteria; however, this compound was not listed on sample Form
 Is and no action was taken by the reviewer based on this finding.
- Target compound triethylene glycol was found in the analysis of method blank 480-27399/1-A at a concentration of 3.14 J mg/L. Sample TC-1 reported a concentration of this blank contaminant less than five times (<5X) the blank concentration and has been qualified "B" on the DSF.
- Sample volumes other than one (1) liter were used in the semivolatile and diesel range organic analyses for the samples associated with this case. The dilution factors reported on the DSFs reflect actual sample volumes analyzed.
- Results and Relative Percent Differences (RPDs) for Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) analyses were within control limits for all parameters.
- Compounds detected below Reporting Limits (RLs) are qualified "J" unless superseded by "B" on the DSFs.

ATTACHMENTS

Appendix A – Glossary of Data Qualifier Codes

Appendix B – Data Summary Form(s)

Appendix C – Chain of Custody Records

Appendix D - Laboratory Case Narrative

DCN: 180-2644-1_Organic

Appendix A
Glossary of Data Qualifier Codes

GLOSSARY OF DATA QUALIFIER CODES (ORGANIC)

CODES RELATED TO IDENTIFICATION

(confidence concerning presence or absence of compounds)

U = Not detected. The associated number indicates approximate sample concentration necessary to be detected.

NO CODE = Confirmed identification.

- B = Not detected substantially above the level reported in laboratory or field blanks.
- R = Unusable result. Analyte may or may not be present in the sample. Supporting data necessary to confirm result.
- N = Tentative identification. Consider present. Special methods may be needed to confirm its presence or absence in future sampling efforts.

CODES RELATED TO QUANTITATION

(can be used for both positive results and sample quantitation limits):

- J = Analyte present. Reported value may not be accurate or precise.
- K = Analyte present. Reported value may be biased high. Actual value is expected to be lower.
- L = Analyte present. Reported value may be biased low. Actual value is expected to be higher.
- UJ = Not detected, quantitation limit may be inaccurate or imprecise.
- UL = Not detected, quantitation limit is probably higher.

OTHER CODES

- NJ = Qualitative identification questionable due to poor resolution.

 Presumptively present at approximate quantity.
- Q = No analytical result.

Appendix B
Data Summary Forms

Project #: 180-2644-1

Number of Soil Samples: 0 Number of Water Samples: 2

Site: DIMOCK Lab.: TALPA

Sample Number / Location:	TC-1		AW-2								
Matrix : Units :		Water ug/L		Water ug/L				•			
Date Sampled:		08/04/2011		08/04/2011							1
Time Sampled :		09:30		13:20							I
pH:		<2.0		<2.0							
Dilution Factor :		1.0		1.0							I
Target Compound	RL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Acetone	5.0	25									
Benzene	1.0										
Toluene	1.0				l						
Bromodichloromethane	1.0										
Ethylbenzene	.,1.0					76 Ygar					
Bromoform	1.0	-									
Xylenes, Total	3.0										Lar
Bromomethane	1.0	transaction and the second									
Isopropylbenzne	1.0	P					e wit		بمعاسط	لمتحلاك الملكة	
2-Butanone	5.0		40.0000000	emprengoni ekokiski Uktobalish			draw dood				
Methyl tert-butyl ether	1.0										
1,2,4-Trimetyhylbenzene	1.0	· Married Transport	Acceptages.				gazzanan	•			
Carbon disulfide	1.0				ALT.			• *			
1,3,5-Trimethylbenzene	1.0										
Carbon tetrachloride	1.0				.085						
Chlorobenzne	1.0		2547524444		I TO SHEET	Edwin Control					
Chloroethane	1.0 ي				8.	1432 H 16			d du		<u> 1890</u>
Chloroform	1.0		REFERENCES				god Britania		Section 2		2022
Dibromochloromethane	1.0					dia.S. K	7				
1,2-dibromoethane (EDB) Naphthalene	1.0		ang birangan				STATE STANSAGE	Tp a ze yea			erreres l
	1.0-			inida A. B							
1,2-Dichloroethane	1.0		1112000000		name.	Programme Company	7005 F127 F1				
Barrier Company of the Company of th	<i>i</i> 1.0.					4					
1,1-Dichloroethane	1.0		atrania art		nistren.		HIMM		re :		
Bromochloromethane	1.0										
1,2-Dichloroethane	1.0			•	guzha)		7.000				eronn.
1/1-Dichloroethene	1.0	944			toriti			<u> </u>			
trans-1,2-Dichloroethene 1,2-Dichloropropane	1.0 1.0		12.75							40.7.7.1964.714.70	L
cis-1,2-Dichloropropene	1.0								Agrani		
trans-1;3-Dichloropropene	1.0										
Ethylbenzene 2-Hexanone	1.0 5,0		Olan				Free IV		skirter skirter		T W
Z-nexamone	9,0										

Project #: 180-2644-1 Site : DIMOCK Lab. : TALPA

Sample Number / Location:		TC-1	************	AW-2					*********		
Matrix:		Water		Water							
Units:		ug/L		ug/L							
Date Sampled :		08/04/2011		08/04/2011							
Time Sampled :		09:30		13:20				<u>.</u>			
pH:		<2.0	4.	<2.0							
Dilution Factor :		1.0		1.0							
Target Compound	RL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Methylene Chloride	1.0										
4-Methyl-2-pentanone (MIBK)	3.0										
Styrene	1.0			.e.:							
1,1,2,2-Tetrachloroethane	, 1.0,	7 7 6 5					22			13.71.75	
Tetrachloroethene	1.0										
Toluene	1.0	ga ^{re}									ŧ
1,1,1-Trichloroethane	1.0		and the control of the								
1,1,2-Trichloroethane	1.04								16	Par Marining A	
Trichloroethene	1.0									codillane constitue de consequilita	
Vinyl Chloride	1.0_										
N-propylbenzne	1.0										
cis-1,2-dichloroethene	1.0				Ce	38.7	# 7°				
1,2-Dichlorobenzene	1.0										
sec-Butylbenzene	THE RESERVE OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COLUMN TW	<u>/</u>									
1,3-Dichlorobenzene	1.0	Annual Value Manager (Manager)	encial changes		and the state of t			transconnection			
p-isopropyltoluene	010	24 H - 1				ming _{tr}				1 7 7 7	resti
1,4-Dichlorobenzene	1.0						NAP KOMM	204020, 2020, 2020, 2000			
1/2/4-Trichlorobenzene	1.07										
Chloromethane	1.0	arakan perkanan kanparan ba		ay ga tina a ja an ina an an an an an	and the same	CONCESSOR OF THE WAY AND A SECOND	- Property III			***************************************	
n-Butylbenzene	1.0								3 4444		
m-Xylene & p-Xylene	2.0								103/2000		
ő-Xylene	1.0								5.76		

RL = Reporting Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (RL * Dilution Factor)

Project #: 180-2644-1 Site : DIMOCK

Lab.: TALPA

Number of Soil Samples: 0

Number of Water Samples: 2

Sample Number / Location:		TC-I		AW-2					ierinoorennoon		
Matrix :		Water		Water	- 1					72	I
Units:		ug/L		ug/L	:	:					ı
Date Sampled :		08/04/2011		08/04/2011							
Time Sampled :		09:30		13:20							
Dilution Factor :		1.18		1.01							1
Semivolatile Compound	RL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Acenaphthene	0.20									27.131 (F. 1910)	
Anthracene	0.20										
Acenaphthylene	0.20		Z	l, I b	W.						
Benzo(a)anthracene	0.20	rida bir son ar revret sammad									
Benzo(b)fluoranthene	0.20							L.			
Benzo(a)anthracene	0.20			Tourns consumers and confidence							
Benzo(g,h,i)perylene	0.20	10		L. V.i.E.		والمراجعة المراجعة	10.	(†	TEAT		
Benzo(a)pyrene	0.20		ALC: N		İ		Sell Print to				
Benzo(k)fluoranthene	0.20	77,436	2								
Chrysene	0.20	and the change are no	100.00			rekeres Karanania	TO THE WAY	And Instituted to the construction			L
Fluorene.	0.20										
Indeo(1,2,3-cd)pyrene	0.20			New Control of the Co		ally light property	SECTION		198210	D - 17 T - 18 T - 18 T	
Bis(2-chloroethoxy)methane	1.00	** \$								F 1	
Phenanthrene	0.20		14.575.6	W	rinaan.		- A	Established Sept Vol School			10 years
Bis(2-chloroethyl)ether	0.20		77			سيدنسة للأ		A TO A SE	4 7 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	A.	
Pyrene	0.20						200	e range a supplementario	0.00		
Bis(2-ethylhexyl)phthalate	2.00							· · · · · · · · · · · · · · · · · · ·	,n,		
Butylbenzylphthalate	1.00	0.17	J		Reserved.						
Carbazole	0.20	ľ									
Chrysene	0.20			191007774.201073.100700	μh	F. 172	COLUMN TO SERVICE SERV		10000000	Ja 10 2010 S. L. L. 1700 W. 1900.	
2-Chloronaphthalene	0.20						132.5		un auto		
2-Chlorophenol	1.00			79	474		1300	7771 73			1000000
2;4-Dichlorophenol	10.20		17/45			47g).			,		
2,4-Dimethylphenol	1.00										17.57
2,4-Dinitrotoluene	5.00 1.00				2.24				2.510		
2,6-Dinitrotoluene	1.00	i 1	N.				1.74	and the area			
1,2-Dichlorobenzene	1.00		<u> </u>	aller attender ball	5 (5)4	() (A, +() ,s1,)	108-127			73.74 F. (f.	
2-Methylnaphthalene	0.20									The state of	
1,3-Dichlorobenzene	1.00	•				Ť			Marie .	Menuda	
2-Methylphenol	1.00	1.114.11.13	997			54		1.			
1,4-Dichlorobenzene	1.00	4:3	Tartell.							14.13	111111111111111111111111111111111111111
2-Nitroaniline (%)	5.00										

Project Number: 180-3644-1

SDG: 2H-1

Site:

DIMOCK

Lab.: TALP

Sample Number / Location:	TC-1	***************************************	AW-2	***************************************		elenemini					
Matrix: Units: Date Sampled: Time Sampled: Dilution Factor:		Water ug/L 08/04/2011 09:30 1.18		Water ug/L 08/04/2011 13:20 1.01	i.						
Semivolatile Compound	RL	Result	Flac	A annum marini da annum a	Flag	Result	Flas	Result	Flag	Result	Flag
2-Nitrophenol	1.00							***************************************			
bis(2-chloroisopropyl)ether	0.20	7				17%		1 8 8			
2,4,5-Trichlorophenol	1.00		l		I					***************************************	
2,4,6-Trichlorophenol	1.00						757				
4-Nitroaniline	5.00										
4-Nitrophenol 12	5.00			7.		Section 3			c., 4	, K.	
4-Chlorophenyl phenyl ether	1.00										
Methylphenol, 3 & 4	1.00	, salve,		10. A				475		7-1727	
4,6-Dinitro-2-methylphenol	5.00										
4-chloroaniline	1.00			PACE I						(
4-Chloro-3-methylphenol	1.00										
4-Bromophenyl phenyl ether 11 1 1	1.00	1									
Dibenz(a,h)anthracene	0.20						L				
Dibenzofuran	1.00					FM47 *	747				
Di-n-butylphthalate	1.00	0.87	J	0.46	J						
Diethylphthålate	1.00			0:20	Э.			1 1 1 1			
Dimethyphthalate	1.00		· Aller Aller Andrews						l jalogu skalenje skringtija		In passaggi alberta
Di-n-octylphthalate , , ,	1.00	TIMES E				1. 113. X					
3,3'-Dichlorobenzidine	1.00		REPORT OF								
3-Nitroaniline	5:00			4 20						<u> </u>	
Fluoranthene	0.20										
1,2,4-Trichlorobenzene	1.00		W.		14-	Marda		*			21
Hexachlorobenzene	0.20				naniments a						amount viinnu
Hexachlorobutadiene	0.20					فيلالتف	M.				المقد
Hexachlorocyclopentadiene	1.00		April				L		Marina de la composición dela composición de la composición dela composición de la c		CONTRACTOR NA
Hexachloroethane	1.00		<u>. 34.</u>	uik aan	24		4			alve (L)	*
Isophorone	1.00		1910221011				destruction		PERSONAL TRANSPORT		and the second
Naphthalene 100 100 100 100 100 100 100 100 100 10	0.20					Linki.				واعتدا	
Nitrobenzene	2.00				great res				STREET, SWALL		2 10 10 10 10 10 10 10 10 10 10 10 10 10
N-Nitrosodiphenylamine	1.00			Za zastilski i		LL					
N-Nitroso-n-propylamine	0.20		2000 AND 1	generalyogana			Augus S	LEAT AND THE PARTY AND			CTRON ACTIONS
Phenol	0.20									ant and bear	142
Phenanthrene	0.20										
Pentachlorophenol	1.00			1.7.1							
Benzyl alcohol	1.00		Marian			an early and the general					
N-Nitrosodimethylamine	1.00				i						
Benzoic acid	5.00		40000000	21.500	e e e e e e		Lugara				
1,2-Diphenylhydrazine (as Azobenzene)			Y. July							الأهبية المتحددة	
I-Methylnaphthalene RL = Reporting Limit	0.20		an Mannan		Į			ATIVE FO			L

RL = Reporting Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (RL * Dilution Factor)

DATA SUMMARY FORM: Glycols

Page 5 of 9

Project #: 180-2644-1

Site: DIMOCK Lab.: TALPA Number of Soil Samples: 0

Number of Water Samples: 2

Sample Number:		TC-1		AW-2							
Matrix:		Water		Water							
Units:		mg/L		mg/L							
Date Sampled:		08/04/2011		08/04/2011							
Time Sampled:		09:30		13:20							
Dilution Factor:		1.0		1.0							
Glycols	RL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Ethylene glycol	10	¥1									
Propylene glycol	10		* * * * * * *	u;						uro Ja	
Triethylene glycol	10	2.7	В			1					
2,2'-Oxybisethanol	10.	1.8,4)_/	y engan J	0.58	J		ľ				
2-Methoxyethanol	10										
2-Ethoxyethanol	10 10										

RL = Reporting Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (RL * Dilution Factor)

DATA SUMMARY FORM: Dissolved Gases

Page _6__ of __9__

Project #: 180-2644-1

Site: DIMOCK

Lab.: TALPA

Number of Soil Samples: 0

Number of Water Samples: 2

Sample Number:	ample Number :										
Matrix : Units :		Water ug/L		Water ug/L							
Date Sampled:		08/04/2011	l	08/04/201	1					۵	
Time Sampled:		09:30		13:20							
pH:	> 2		>2								
Dilution Factor:		1.0		1.0							
Dissolved Gases	RL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ETHANE	1.5		UL		UL						
ETHENE	1.5		UL	ÜL)		
METHANE	1.0	18		UL							
PROPANE			UL								

RL = Reporting Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (RL * Dilution Factor)

Project #: 180-2644-1

Site: DIMOCK

Lab.: TALPA

Number of Soil Samples: 0

Number of Water Samples: 2

Sample Number :		TC-1		AW-2							,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Matrix :		Water		Water				:			
Units:		ug/L		ug/L	1				I		
Date Sampled:		08/04/201	1	08/04/201	1				1		
Time Sampled :	*** =	09:30		13:20							
Dilution Factor:		1.0		1.0	ı				ı		
Analyte	RL	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
Ethylene Dibromide (EDB)		142									

RL = Reporting Limit

*Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (RL * Dilution Factor)

DATA SUMMARY FORM: Gas Range Organics (GRO)

Page 8 of 9

Project #: 180-2644-1

Site: DIMOCK

Lab.: TALPA

Number of Soil Samples: 0

Number of Water Samples: 2

Sample Number :		TC-I		AW-2							
Matrix:		Water		Water							
Units:		ug/L		ug/L			1		4		
Date Sampled ;		08/04/201	l	08/04/2011			1				
Time Sampled:		09:30		13:20	l				1		
pH:		<2.0		<2.0	1		1				
Dilution Factor:		1.0		1.0							
Analyte	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	
Gas Range Organic (GRO)	25			17	J						I

RL = Reporting Limit

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (RL * Dilution Factor)

DATA SUMMARY FORM: Diesel Range Organics (DRO)

Page _9__ of __9__

Project #: 180-2644-1

Site: DIMOCK

Lab.: TALPA

Number of Soil Samples: 0

Number of Water Samples: 2

Sample Number :		TC-1		AW-2			A				
Matrix:	7	Water	_	Water							
Units:	mg/L	9	mg/L	ı		1					
Date Sampled:		08/04/201	1	08/04/201	1						
Time Sampled:		09:30	13:20			1		ĺ			
Dilution Factor:		0.98		1.05					1		
Analyte	RL Result Fla				Flag	Result	Flag	Result	Flag	Result	Flag
Diesel Range Organic (DRO)	iesel Range Organic (DRO) 0.50										

RL = Reporting Limit

*Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS

To calculate sample quantitation limits: (RL * Dilution Factor)

Appendix C Chain of Custody Records

TostA	merica Labora	itory localien:		Chair				un	2h			(,	Wo	— ite	ヘク)	**	₽Z.	(8- 4		, change	tAm	erico	7
	Regulat	tory program:		DW (NP	DES	C	RC	κλ	<u></u>	Othe	r							5956			7.		-
Client Contact	Client Project I	Managev:			Site Co	ontact:	+					Lab	Contact	t:					+	-		TOC No.	boratories, In	-
urs corporation	Thoma	s Mers	ki			Jii	M I	Pin	ta				Ca	rri	le	80	LVA	be	X		1	00	15408	31
501 Holidau Dr. Suite 300	112-	503-4	603		Teleph 4	1-01	60	-63	42		<u>;(1)</u>	Telej Z	12-	-91	03		70)5	B		7	·/_	cocs	1
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Sample Identification	Sample Date	Sample Time	4 4 1	Page 6	RZSOM	HNOS	g	NaOH	Ungres	Li Albert	ì	Š		屋	祖	国	93 98 9	A	ফ	Deo	EW	Sample Sp	secific Notes / astructions:	٦
TC-1	8/4/11	9:30	N	iii -	Ť		Ť			Ĭ	I	X	X	X	X	X	×	X	X	X	X		F-93/100	٦
AW-2	8/4/4	13:50						•			П	Х	×	×	K	X	V	ید	人	ير	K]
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			X.	╂	+-	Н	\mathbb{H}		+	-	\mathbb{H}	┢	\vdash	\vdash	-	4					H		*	4
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			Y.								П													
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Appendix D Laboratory Case Narrative



ANALYTICAL REPORT

Job Number: 180-2644-1

Job Description: Focused Site Assessment

For:
URS Corporation
Foster Plaza 4
501 Holiday Drive, Suite 300
Pittsburgh, PA 15220

Attention: Mr. James Pinta, Jr.

Approved for release. JBI L Columny Project Mgmt. Assistant

Designee for
Carrie L Gamber
Project Manager II
carrie.gamber@testamericainc.com
09/13/2011

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of TestAmerica and its client. All questions regarding this report should be directed to the TestAmerica Project Manager or designee who has signed this report.

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CABOT-EPA 000176

CASE NARRATIVE

Client: URS Corporation

Project: Focused Site Assessment

Report Number: 180-2644-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 08/05/2011; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 0.0 and 0.7 C.

The laboratory received a broken 1L amber bottle for sample TC-1 (180-2644-1).

The laboratory only received six VOA vials for sample AW-2 (180-2644-2) instead of nine.

LOW LEVEL VOLATILE ORGANIC COMPOUNDS

Methylene Chloride and Toluene were detected in method blank MB 180-10937/3 at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)

No difficulties were encountered during the semivolatiles analyses.

GAS RANGE ORGANICS

No difficulties were encountered during the GRO analyses.

GLYCOLS

Triethylene Glycol was detected in method blank MB 480-27399/1-A at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged.

The continuing calibration verification (CCV) (CCV 480-27383/3) for Ethylene Glycol recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

DISSOLVED GASES

The following samples submitted for dissolved gases analysis were received with incorrect preservation (pH >2): AW-2 (180-2644-2) and TC-1 (180-2644-1).

1,2-DIBROMOETHANE AND 1,2-DIBROMO-3-CHLOROPROPANE BY MICROEXTRACTION AND GAS CHROMATOGRAPHY No difficulties were encountered during the EDB and DBCP analyses.

DIESEL RANGE ORGANICS

No difficulties were encountered during the DRO analyses.

METALS

Antimony, Boron and Molybdenum were detected in method blank MB 180-10641/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged. Refer to the QC report for details.

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Several analytes were detected in method blank MB 180-10417/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged. Refer to the QC report for details.

GENERAL CHEMISTRY

The method blanks had compounds detected at a level that was above the method detection limit but below the reporting limit. The values should be considered an estimate, and have been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged.

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		12			

Login Container Summary Report

180-2644

Client Sample ID	Lab ID	Container Type	Container pH	Preservative Added (mls)	Lot#
TC-1	180-2644-A-1	Plastic 1 liter - unpreserved		-	****
TC-1	180-2644-B-1	Amber Glass 1 liter - Sulfuric Acid	2	- Mineral de la company (***************************************
TC-1	180-2644-C-1	Amber Glass 1 liter - unpreserved	Management.		
TC-1	180-2644-D-1	Amber Glass 1 liter - unpreserved		-	
TC-1	180-2644-E-1	Amber Glass 1 liter - Hydrochloric			
TC-I	180-2644-F-1	Amber Glass 1 liter - Hydrochloric	Z	Spirotetiska skining terminal skining te	
TC-I	180-2644-G-1	Plastic 500ml - with Nitric Acid	<u>z</u>	· /	
TC-1	180-2644-H-1	Plastic 500ml - unpreserved	· · · · · · · · · · · · · · · · · · ·		
TC-1	180-2644-I-1	Plastic 250ml - with Sulfuric Acid	2		
TC-1	180-2644-J-1	Voa Vial 40ml - with Sodium			looperage the latter to the same and
TC-1	180-2644-K-1	Voa Vial 40ml - with Sodium	<u>_p_</u>	description of the second seco	
TC-1	180-2644-L-1	Voa Vial 40ml - unpreserved		***************************************	
TC-1	180-2644-M-1	Voa Vial 40ml - unpreserved	************	***************************************	
TC-1	180-2644-N-1	Voa Vial 40ml - unpreserved		***************************************	
TC-I	180-2644-O-1	Voa Vial 40ml - Hydrochloric Acid			
TC-I	180-2644-P-1	Voa Vial 40ml - Hydrochloric Acid		***************************************	
TC-I	180-2644-Q-1	Voa Vial 40ml - Hydrochloric Acid			
TC-I	180-2644-R-1	Voa Vial 40ml - Hydrochloric Acid		14000 10 hours, page 10 page 1	
TC-1	180-2644-S-1	Voa Vial 40ml - Hydrochloric Acid			platety to the the the transmitted
TC-1	180-2644-T-1	Voa Vial 40ml - Hydrochloric Acid			'ainneanaisisisisas annua ar ann
TC-1	180-2644-U-1	Voa Vial 40ml - Hydrochloric Acid			***************************************
TC-1	180-2644-V-1	Voa Vial 40ml - Hydrochloric Acid			
TC-1	180-2644-W-1	Voa Vial 40ml - Hydrochloric Acid	<u> </u>		50000000000000000000000000000000000000
AW-2	180-2644-A-2	Plastic 1 liter - unpreserved	***************************************		
AW-2	180-2644-B-2	Amber Glass 1 liter - Sulfuric Acid	2		
AW-2	180-2644-C-2	Amber Glass 1 liter - Sulfuric Acid	1	Name of the last o	***************************************
AW-2	180-2644-D-2	Amber Glass 1 liter - unpreserved	· ·	A	
AW-2	180-2644-E-2	Amber Glass 1 liter - unpreserved		-	
AW-2	180-2644-F-2	Amber Glass 1 liter - Hydrochloric	<u> </u>	-	; <u></u>
AW-2	180-2644-G-2	Amber Glass 1 liter - Hydrochloric	1 1 2	delastishtranamenninaseinpases	
AW-2	180-2644-H-2	Plastic 500ml - with Nitric Acid	7.	-	***************************************
AW-2	180-2644-1-2	Plastic 500ml - unpreserved	- 30000000000	wheelers and a second s	****
AW-2	180-2644-J-2	Plastic 250ml - with Sulfuric Acid	<u> </u>	***************************************	***************************************
AW-2	180-2644-K-2	Voa Vial 40ml - with Sodium		Mathematica and a second a second and a second a second and a second a second and a second and a second and a	
AW-2	180-2644-L-2	Voa Vial 40ml - with Sodium	L		A
AW-2	180-2644-M-2	Voa Vial 40ml - unpreserved		Name and Advanced Park	
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Client Sample ID	Lab ID	Container Type	Container pH	Preservative Added (mls)	Lot#
AW-2	180-2644-N-2	Voa Vial 40ml - unpreserved	i ·		4
AW-2	180-2644-O-2	Voa Vial 40ml - unpreserved	***************************************		The second secon
AW-2	180-2644-P-2	Voa Vial 40ml - Hydrochloric Acid			
AW-2	180-2644-Q-2	Voa Vial 40ml - Hydrochloric Acid		***************************************	
AW-2	180-2644-R-2	Voa Vial 40ml - Hydrochloric Acid			-
AW-2	180-2644-S-2	Voa Vial 40ml - Hydrochloric Acid			
AW-2	180-2644-T-2	Voa Vial 40ml - Hydrochloric Acid			
AW-2	180-2644-U-2	Voa Vial 40ml - Hydrochloric Acid	4		

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